

Result Type: Brain MRI w/ + w/o Contrast  
Performed Date: July 18, 2011 9:58 AM  
Result Status: Final  
Result Title: MR BRAIN WITH AND WITHOUT CONTRAST  
Encounter info: UPMCSHY, Inpatient, 7/17/2011 - 8/18/2011

**\* Final Report \***

**MRBRAINWX**

**HISTORY:**

Progressive diplopia. Fevers and concern for CNS lymphoma.

**COMPARISON:**

None.

**TECHNIQUE:**

Routine, multiplanar, multisequence MR examination of the brain was obtained. Additional axial and coronal T1-weighted images as well as axial SPGR images were obtained after the administration of 14cc of MultiHance intravenous contrast material.

**FINDINGS:**

Please note the current study is somewhat limited by patient motion, despite repeated acquisition. The midline structures of the brain are not well evaluated on the current examination due to prominent patient motion. Specifically, the cerebral aqueduct is not well identified on the sagittal images. Grossly it appears within normal limits on the axial images. The cerebellar tonsils are mildly low-lying, but likely still within normal limits. No definite restricted diffusion is seen in morphology to suggest an acute infarct. On the gradient echo images, no definite suspicious regions of signal loss are seen to indicate a microhemorrhage.

On the FLAIR images, there is diffuse increased signal within the subarachnoid spaces. This is nonspecific in appearance and may be seen in patients after high inspired oxygen content therapy. However, an infection of the CSF space may also have a similar appearance, and clinical correlation is recommended. On the post-contrast imaging, there appears to be some increase in enhancement within the subarachnoid spaces, which may possibly be due to technical factors, but may also be seen within an infection or possibly a neoplastic process within the CSF space. There is even the suggestion of possible leptomeningeal enhancement in the region of the cervical spine.

The major arterial flow voids appear preserved at the skullbase. The visualized mastoid air cells are essentially clear. The soft tissues within the nasopharynx and at the tongue base appear grossly symmetric. There may be mild mucosal thickening involving the ethmoid air cells. Evaluation of the globes and orbits is limited on the current examination due to prominent patient motion in this region. The major arterial flow voids appear to be preserved at the skullbase.

**IMPRESSION:**

1. Abnormal T2 signal on the FLAIR images within the subarachnoid space is nonspecific in appearance and may be related to technical factors or seen in patients after high inspired oxygen content.

However, it may also be seen in infectious or possibly even neoplastic processes of the subarachnoid space and correlation with CSF analysis is recommended.

2. On the postcontrast images, there may be the suggestion of subarachnoid enhancement extending into the region of the cervical spine. This may also be related to technical factors but an infectious or possibly neoplastic process within the subarachnoid space may have a similar appearance. Again, correlation with CSF analysis is recommended.

These findings were reported via a preliminary report in the PACS system at the time of dictation. Additionally, the patient's treating clinician Dr. [REDACTED] paged at the time of dictation. These findings were discussed with Dr. [REDACTED] on 07/18/2011 at 1019 hours.

END OF IMPRESSION:

Dictated by: [REDACTED]  
Signed by: [REDACTED]  
Signed on: 07/19/2011 at 11:42 AM